# UNLOCKING THE POTENTIAL OF INTELLECTUAL PROPERTY (IP) WITHIN THE UNIVERSITY OF LOUISIANA SYSTEM















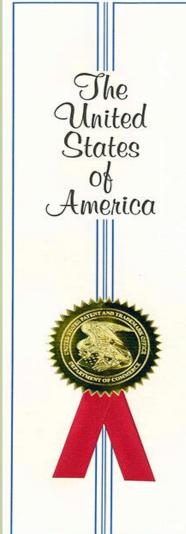






#### **AGENDA**

- Introduction
- Disclaimer
- Understanding IP
- Navigating the Disclosure Process
- Inventorship & Ownership
- Understanding Tech Transfer
- Technology Transfer Regulations
- Conclusion
- Q&A



#### The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

#### United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Margaret a. Focusion

Commissioner for Patents of the United States Patent and Trademark Office

#### DISCLAIMER

The information provided in this presentation is for educational purposes only. It is designed to provide a general understanding of intellectual property (IP) and technology transfer within a university context, and it does not constitute legal advice.

Situations involving IP and Tech Transfer can be unique and complex and each Institution within the University of Louisiana System has its own unique approaches and methods for handling intellectual property and commercializing technologies, which are consistent and in compliance with the University of Louisiana Systems Intellectual Property and Shared Royalties Policy and Procedures Memorandum. Therefore, it is crucial that specific questions or concerns, involving IP law, strategy, and protection be directed to your Institutions' technology transfer office and the legal counsel they recommend.

# **Understanding Intellectual Property (IP)**

What is IP? Types of IP

# WHAT IS INTELLECTUAL PROPERTY?

According to the University of Louisiana Systems Intellectual Property and Shared Royalties Policy and Procedures Memorandum, IP is defined as:

"The result of intellectual or artistic activity created by an individual in a scholarly, professional or student capacity including but not limited to inventions, discoveries, know-how, show-how, processes, unique materials, original works, computer software, scientific or technological developments and other creative or artistic works that have value; regardless of whether subject to protection under patents, copyrights, trademarks, service marks, trade secrets, mask works, and plant variety protection certificates.

It also includes the physical embodiments of intellectual effort, for example, models, machines, devices, designs, apparatus, instrumentation, circuits, computer programs and visualizations, biological materials, chemicals, other compositions of matter, plants, and records of research."

Source: http://www.ulsystem.net/assets/docs/searchable/boards/FS-III.VI.-1a%20Intellectual%20Property%2010\_23\_2012.pdf

Policy Number: FS.III.VI.-1a

University of Louisiana System

Title: INTELLECTUAL PROPERTY AND SHARED ROYALTIES

Effective Date: October 23, 2012

Cancellation of

Policy Issued: August 27, 2007

Chapter: Faculty and Staff

Policy and Procedures Memorandum

#### I. PURPOSE

The University of Louisiana System recognizes that academic research and scholarship should be encouraged without regard to potential gain from licensing fees, royalties, or other income; however, the System also recognizes that Intellectual Properties and discoveries may arise from the activities of faculty

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E. PURPOSE

#### **TYPES of IP**

#### **Patents**



According to 35 U.S.C. § 101, any person who invents or discovers:

- any new and useful process
- a machine
- an article of manufacture
- a composition of matter
- any new and useful improvement thereof

may obtain a patent (also known as patentable subject matter).

#### **Trademarks**





A trademark can be either a word, phrase, symbol, or design or a combination of words, phrases, symbols or designs, that identifies and distinguishes the source of goods of one party from those of others. A trademark:

- identifies the source of your goods & services
- provides legal protection for your brand
- helps you to guard against counterfeiting & fraud

#### **Copyrights**



Copyright is a form of protection grounded in the U.S. constitution and granted by law for original works of authorship fixed in a tangible medium of expression. Copyright covers both published and unpublished works. The three requirements of a copyright are:

- originality/creativity
- fixation
- works of authorship

#### **Trade Secrets**



According to the Uniform Trade Secrets Act (UTSA), a trade secret is defined as any formula, pattern, compilation, program, device, method, technique or process that:

- provides the owner a market advantage if kept secret from competitors
- is reasonably expected to prevent others from learning about it, absent improper acquisition or theft

#### **Patents**

The United States Patent and Trademark Office (USPTO) defines a patent as a property right granted by the government of the United States of America to an inventor "to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States" for a limited time in exchange for public disclosure of the invention when the patent is granted (e.g. **exclusionary right).** What is granted is not the right to make, use, offer for sale, sell or import the invention, but the right to stop others from doing so. If someone infringes on your patent, you may initiate legal action. U.S. patents are effective only within the U.S. and its territories and possession (e.g territorial).

#### There are essentially three (3) main types of patents:

- Utility Patents for inventing a new or improved and useful process, machine, article of manufacture or composition of matter
- **Design Patents** for inventing a new, original, and ornamental design for an article of manufacture
- **Plant Patents** for inventing or discovering and asexually reproducing any distinct and new variety of plant.

#### **Patent Terms**

Utility and plant patents have a term for up to 20 years from the date the first non-provisional application for patent was filed. A design patent is granted for a term of 15 years from the date of grant.

#### Quid Pro Quo

The inventor gets a temporary monopoly in exchange for public disclosure of the invention, which includes disclosing what the invention is and how to make

and use it.

#### **Patents**

#### **Requirements for Patentability**

Patentable Subject Matter is defined as <u>any process, machine, manufacture, composition of matter or improvement of matter.</u> Inventions that are not considered as patentable include laws of nature, theories, scientific principles, pure algorithms and plans of actions, ideas or results.

**Utility (Useful)** means the item being patented has a credible, specific and substantial purpose. <u>It provides</u> <u>some identifiable benefit and is capable of use</u>. <u>Fantastic or hypothetical devices or perpetual machines</u> <u>are not useful.</u>

**Novelty** means an invention must be <u>different and distinguishable</u> from anything that is publicly known or available. In other words it must be new. <u>The statutory bar requires that the patented item must not have already been in public use or for sale in the U.S. for more than one year prior to the date the patent was applied for.</u>

Non-obviousness requires a patent to contain more that obvious differences from the prior art.

**Enablement** *requires that an applicant give a sufficiently good description of his or her invention* such that one of ordinary skill in the art would be able to make and use the invention.

#### **Trade Secrets**

A **trade secret** is a type of intellectual property that comprises formulas, practices, processes, designs, instruments, patterns, or compilations of information that <u>have inherent economic value because they are not generally known or readily ascertainable by others, and which the owner takes reasonable measures <u>to keep secret</u>. This may include anything from a particular method of production, to customer lists, to the results of lengthy and expensive research and development.</u>

**Trade secrets** are a business's hidden gems that give it a competitive advantage in the market. Unlike patents, copyrights, or trademarks, <u>trade secrets are protected without any procedural formalities related</u> to the laws of a country. They remain valid as long as the secret is kept confidential.

#### **Famous Trade Secrets**

- Google's Search Algorithm
- Coca-Cola's Coke Syrup Formula
- KFC's Original Recipe
- McDonald's Big Mac Special Sauce
- WD-40's Multi-use Product Formula

#### Patents vs. Trade Secrets



	Patents	Trade Secrets	
Duration	Limited (usually 20 years from filing date)	Indefinite as long as the secret is kept	
Cost	Filing, prosecution, and maintenance costs	No registration costs, but costs for maintaining secrecy	
Protection	Protects against all unauthorized uses, including independent discovery and reverse engineering	Protects only against unauthorized acquisition, use, and disclosure, but not against independent discovery or reverse engineering	
Disclosure	Requires full public disclosure in the patent application	Requires efforts to keep the information secret; no public disclosure	
Subject Matter	Must be a new, useful, and non-obvious process, machine, manufacture, or composition of matter, or improvement thereof	Can be any information that has economic value from not being generally known and is subject to reasonable efforts to maintain secrecy	
Enforcement	Enforced through litigation by the patent owner	Enforced through litigation by the trade secret owner, often under state law	
Geographic Scope	Generally limited to the country/region of the patent grant	Can be effective worldwide, but enforcement depends on local laws	
Time to Obtain	Can take several years due to examination process	Protection starts immediately upon creation and successful secrecy	
When to Use	If possible to reverse engineer; Long lead time to production; and Desire to publicize know-how	If impossible to reverse engineer; Imminent commercial use; Long-term high security; and Idea is not patentable	

#### Trademark s

A trademark is how customers recognize you in the marketplace and distinguish you from your competitors. The word "trademark" can refer to both trademarks and service marks. A trademark is used for goods, while a service mark is used for services.

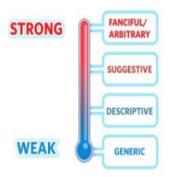
#### **Trademarks:**

- give you the exclusive right to use your mark.
- prevent competitors from using a mark that's the same as or very similar to yours.
- identify the source of your goods or services.
- provide legal protection for your brand.
- help you guard against counterfeiting and fraud.

#### **Trademark Term**

The term of a federal trademark registration is 10 years. However, you can renew your trademark registration indefinitely as long as you (1) continue to use your mark in commerce and (2) file the required documents and evidence with the USPTO. On every tenth anniversary of the registration date, the owner has to submit to the US Patent and Trademark Office proof that the trademark is in use.

#### Trademark s



#### **Fanciful**

- Invented words
- Inherently distinctive and had no meaning before their use as a trademark.
- Have meaning in relation to their goods or services.

BEST





#### **Arbitrary**

- Actual words that have no association with the underlying goods or services.
- Unlike fanciful marks, an arbitrary mark is a real word, but the word is used such that there is no connection to the meaning.







#### **Suggestive**

- Words that suggest some quality of the goods or services, but don't state that quality of the goods or services outright.
- Tells, evokes, implies, or suggests a unique or distinctive characteristic.
- Requires imagination, thought and perception for the consumer to reach a conclusion as to the exact nature of the goods.

#### **Descriptive**

- Describe some aspect of your goods or services without identifying or distinguishing the source of those goods or services.
- Registrable in certain circumstances, such as your trademark gaining **distinctiveness** through extensive **use in commerce** over many years, thereby creating a secondary meaning.
- Secondary meaning occurs when customers come to recognize the particular term as having a second meaning, signifying a particular brand.

#### Generic

Grayhound

- A generic term is a word that designates that type of product (genus) rather than the origin/quality of one of that type of product.
- A Generic Mark is a mark that describes the general category of the product or is a word by which something is commonly called.

Examples:

Aspirin, Milk, Paint

JAGUAR

# Copyright s

Copyright is a form of protection grounded in the U.S. Constitution and granted by law for original works of authorship fixed in a tangible medium of expression. Copyright covers both published and unpublished works.

#### **Fundamental Requirements of a Copyright?**

#### **Originality/Creativity**

• Originality entails independent creation or a work featuring a modicum of creativity. The question you should ask, "Is there some original contribution?

#### **Fixation**

• In order for a copyright to be protectable, it must be fixed in some tangible medium of expression.

#### **Works of Authorship**

Works of authorship include literary works, musical works, pictorial, graphic, and sculptural works, audiovisual works, and sound
recordings, as well as many other types of creative works.

#### **Copyright Terms**

- For works created after January 1, 1978, copyright protection lasts for the life of the author plus an additional 70 years.
- If a work is a joint work with multiple authors, the term lasts for 70 years after the last surviving author's death.
- For an anonymous work, a pseudonymous work, or a work made for hire, the copyright endures for a term of 95 years from the year of its first publication or a term of 120 years from the year of its creation, whichever expires first.

# Copyright s

#### What Are the Rights of a Copyright Owner?

#### Copyright provides the owner with the exclusive right to:

- Reproduce the work in copies or phonorecords
- Prepare derivative works based upon the work
- Distribute copies or phonorecords of the work to the public by sale or other transfer of ownership or by rental, lease, or lending
- Perform the work publicly if it is a literary, musical, dramatic, or choreographic work; a pantomime; or a motion picture or other audiovisual work
- Display the work publicly if it is a literary, musical, dramatic, or choreographic work; a pantomime; or a pictorial, graphic, or sculptural work. This right also applies to the individual images of a motion picture or other audiovisual work
- Perform the work publicly by means of a digital audio transmission if the work is a sound recording

#### What Is Not Protected by Copyright?

#### **Copyright does not protect:**

- Ideas, procedures, methods, systems, processes, concepts, principles, or discoveries
- Works that are not fixed in a tangible form (such as a choreographic work that has not been notated or recorded or an improvisational speech that has not been written down)
- Titles, names, short phrases, and slogans
- Familiar symbols or designs
- · Mere variations of typographic ornamentation, lettering, or coloring
- Mere listings of ingredients or contents

# Navigating the Disclosure Process

In-house Disclosure (Invention Disclosures)
Public Disclosure (Conferences, Publications, Posters,
Theses, etc.)

# Invention Disclosures

An Invention disclosure also called an innovation disclosure is a document:

- 1) that provides a detailed description of the invention
- 2) is typically prepared by the inventor and sometimes with the aid of the technology transfer office
- 3) is submitted to the technology transfer office
- 4) is the foundation of the patent application Note: Each technology transfer office has their own unique process for how new inventions should be disclosed to their office.

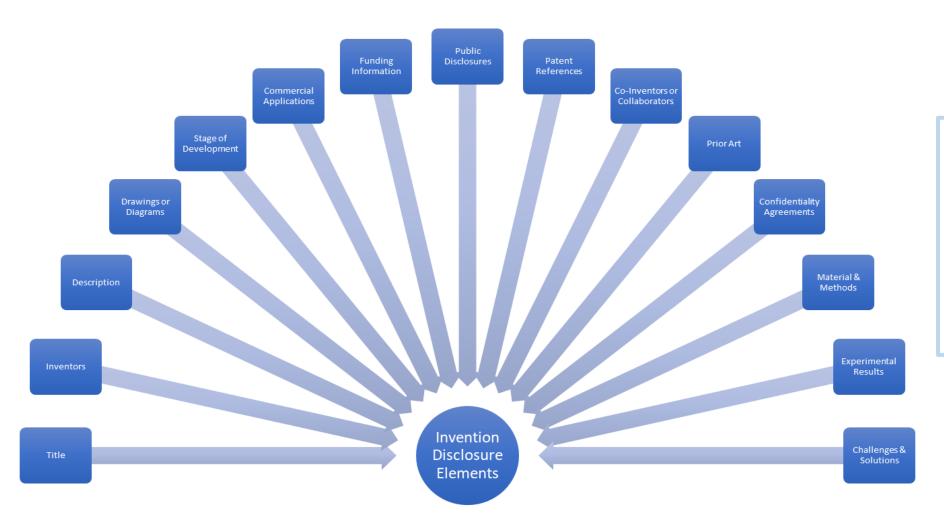
An invention disclosure is not:

- 1) a patent application
- 2) a dissertation or journal article
- 3) a public disclosure

System's Intellectual Louisiana **Property and Shared Royalties Policy Procedures** Memorandum is defined disclosure Intellectual Property in which the institution has an ownership interest under the provisions of this policy and that has the potential to be brought into practical use for public benefit or for which disclosure is required by law or agreements shall be reported promptly in writing by the Creator to the designated institution officer or representative. The disclosure shall constitute a full and complete disclosure of the subject matter of the discovery or development identify all persons participating

# Invention Disclosures

#### **Invention Disclosure Form Elements**



Key Takeaway: Submitting an invention disclosure to the technology transfer office does not mean the application was filed at the patent office. To disclose the invention publicly before a filing occurs could potentially cause the university to lose certain patent rights.

#### What is Public Disclosure?

Under patent law, public disclosure is any non-confidential communication of an idea or invention.

According to 35 U.S.C. § 102, a person shall be entitled to a patent unless (a) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention

The U.S. patent law provides a grace period that gives an inventor one year to file a patent application after disclosing an invention to the public.

Tablic disclosures may include

- Public presentation
- Poster session
- Department or campus seminar
- Online information posting
- Publicly available funded grant proposal abstract
- Filing of a provisional patent application without filing a corresponding utility patent within one year after the provisional filing
- Public release of an academic publication (printed or digital online)
- Public release of an abstract, master's thesis, Ph.D. dissertation, or open thesis defense.
- Posters, Abstracts, and

### Common Examples of Public Disclosures

**Submitted Manuscripts and Online Publications** 

As a general rule, manuscripts submitted to peer-reviewed journals are treated with confidentiality by the journal's editors and reviewers. Some journals have written guidelines stating that the submitted manuscript will remain confidential and will not be released to the public prior to publication.

A submitted manuscript becomes a printed publication" available to the public as soon as it is either published in print by the journal or made available online. Journals often publish articles online ahead of print, and occasionally without advance warning. Therefore, it is important to determine in advance the exact dates for both online and printed publication, and then to file a patent application before publication occurs. If publication has already occurred, then a patent application should be filed as soon as possible within the U.S. grace period.

Source: https://www.mcciplaw.com/disclosure-activities-in-university-settings/

### **Common Examples of Public Disclosures**

#### **Theses and Dissertations**

A thesis or dissertation is generally sufficiently accessible to the public to constitute prior art as a "printed publication" once it is indexed and shelved in a library. Even if access to the library is restricted, a reference will constitute a "printed publication" as long as a presumption is raised that the portion of the public concerned with the art would know of the invention, e.g., by being informed of its existence or by means of customary research aids available in the library.

A patent application should be filed before any thesis or dissertation describing the invention is either indexed and shelved in the library or published by a third-party.

Source: https://www.mcciplaw.com/disclosure-activities-in-university-settings/

# Common Examples of Public Disclosures Scientific Meeting Presentations

Attendees that want to present either a poster or an oral presentation often submit their abstract ahead of the meeting, which is then compiled into a volume that is typically made available to meeting attendees one or two months prior to the meeting. This abstract would likely be considered a "printed publication."

#### **Discussions with Industry or Potential Investors**

Many researchers will have discussions with industry or potential investors in order to advance their research. If a confidential disclosure agreement is executed with the non-university party, then the disclosure generally is no longer considered a public disclosure for patent purposes. As long as the Tech Transfer Office is made aware of meetings with third parties, they can take the proper steps to prevent the disclosure from being considered a public disclosure.

Source: https://www.mcciplaw.com/disclosure-activities-in-university-

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### **Common Examples of Public Disclosures**

#### **Electronic Publication**

An electronic publication, including an online database or Internet publication (e.g., discussion group, forum, digital video, or social media post), is considered to be a "printed publication" provided the publication was accessible to the public.

#### **Grant Applications**

Applications for federal grants are not available to the public. <u>If the application is not funded it remains</u> <u>confidential</u>. <u>If the application is funded the abstract is made available to the public, and the rest of the funded application is available to a member of the public by filing a request under the Freedom of <u>Information Act (FOIA)</u>. A grant recipient is informed of a FOIA request by a third party and the recipient is given the opportunity to redact certain parts of the funded application.</u>

Source: https://www.mcciplaw.com/disclosure-activities-in-university-settings/

# Inventorship vs. Ownership

What is Inventorship? What Constitutes Ownership?

#### Inventorship

#### What is Inventorship?

Inventorship is a legal concept within patent law. It refers to those individuals who have made a significant intellectual contribution to the conception of the ideas that form an invention. <u>Simply contributing to the reduction of an idea to practice (the actual creation or development of the invention) is not enough to qualify as an inventor; rather, one must have contributed to the invention's conception, which includes forming a definite and permanent idea of the complete and operative invention.</u>

#### Criteria for determining inventorship generally include:

Conception of the invention: This is the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is to be applied in practice. <u>Conception is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.</u>

Contribution to the claimed invention: <u>The individual must have contributed</u> <u>to the conception of the invention as it is claimed in the patent</u>. If a patent includes multiple claims, an individual who has contributed to the conception of one claim is an inventor, even if they didn't contribute to other claims.

#### **Joint Inventors**

Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent."

#### Inventorship

#### What is Not Considered Inventorship?

- An individual who merely suggests an idea without the means of accomplishing the task is not a contributor to the conception of the invention.
- An individual who has simply followed the instructions of another is not a contributor to the conception of the invention.
- Simply providing the workspace, tools, or hands-on help in the actual construction of the invention does not constitute inventorship.
- Financing an invention, providing the physical laboratory in which research is done, or managing a research team does not make someone an inventor.
- Serving in an advisory or supervisory role alone doesn't make someone an inventor, unless they contribute intellectually to the invention's concept.
- The collection of experimental data and routine analysis typically do not qualify a person as an inventor, unless the analysis leads to an inventive concept or the identification of a previously unrecognized property or use.
- Refining an invention, such as optimizing conditions or scale-up, does not constitute inventorship, unless such optimization results in a new, inventive concept.

#### **What Constitutes Ownership?**

<u>Patent ownership in the US begins with the inventors</u>. The inventors are presumed to have conceived the invention and therefore own their invention. Therefore the question of ownership starts with the determination of who are the inventors.

A university becomes owner of the invention when the <u>inventor assigns his/her rights over to the university</u> <u>through a written contract called the employment agreement at the time of hiring and through an assignment agreement</u> submitted along with the disclosure agreement (e.g. express contract to assign).

The first contract transferring ownership to the university should be the <u>university employment agreement or</u> <u>other contract allowing someone to do research at the university</u> (e.g. visiting researcher agreement). It is common for universities to require that faculty, staff, and sometimes students, sign agreements to assign certain IP rights to the university.

#### Who are Considered Coowners?

<u>If the inventor co-applicant contributed to the conception of at least one claim they will have an equal and undivided interest in the entire patent</u> and may freely and independently license or sell his or her rights without accounting to the other co-owners.

This means that one <u>co-owner (or co-inventor) can sell the patented invention without having to pay</u> <u>anything to any other co-owner (or co-inventor).</u> Similarly, <u>one co-owner can grant a license to a company</u> <u>without the consent of the other co-owners and without having to give the other co-owners a share of the license royalties.</u>

Nonemployees such as visiting scientists, students, or fellows performing research with faculty may end up being joint inventors with university employees and should be required to execute agreements transferring ownership of any resulting inventions to the university. If no agreement is executed, a university IP policy may not be sufficient to ensure transfer of ownership.

#### **Various Types of Ownership Rights**

**Shop Rights**: Even if the university does not own a patent, it might retain the right to use an invention created by an employee using university resources. This is non-exclusive and is usually confined to internal use. It doesn't confer rights to commercialize the invention or license it to others. The courts have held that in such circumstances, the employee by force of law must give his employer a nonexclusive, royalty-free right to practice the invention.

**Hired to Invent**: This relates to the scenario where <u>an individual, such as a faculty member or a researcher, is explicitly hired by the university to invent or create something specific.</u> In this case, the university usually owns the rights to any resulting invention, as it's a product of the individual's employment terms. It's generally included in the employment contract that any invention resulting from their work belongs to the university.

Work for Hire: This term is rooted in copyright law. <u>It applies when an employee creates a copyrightable</u> <u>work as part of their employment, or when a specific work is commissioned under certain conditions</u>. The employer, in this case, the university, is considered the author of the work and owns the copyright. This might include lecture notes, research articles, software, and other similar materials.



	Shop Rights	Hired to Invent	Work for Hire
	The university can use the invention internally but cannot commercialize it.		The university can use, commercialize, or license the copyrighted work.
	· · · · · · · · · · · · · · · · · · ·	The employee may have limited or no rights over the invention, depending on the employment contract.	The employee has limited or no rights over the work; the university is considered the author and owner.
		Encompasses internal and external use, including commercialization.	Encompasses internal and external use, including commercialization.
	* * *	Applies mainly when an employee is specifically hired to create an invention.	Applies to works created by employees as part of their job or certain commissioned works.
		The university has more freedom to manage and utilize the invention.	The university has full control over the work's use and management.
Types of IP	Applicable to inventions (patents).	Applicable to inventions (patents).	Applicable to copyrightable works.

# Understanding Technology Transfer

What is Technology Transfer?
Tech Transfer Process
Federal Regulations (Bayh-Dole Act)

# WHAT IS TECHNOLOGY TRANSFER?

Technology transfer refers to the formal process of transferring scientific findings from one organization to another for the purpose of further development and commercialization.

Universities, particularly public institutions, have a core mission to contribute to the public good or public benefit. This typically includes commitments to creating new knowledge through research, sharing this knowledge through education, and driving economic and social development.

University technology transfer is a crucial mechanism through which universities fulfill these commitments, by ensuring that scientific and technological innovations derived from a university's research are transformed into new products, services, applications, or processes that will ultimately make their way into the wider world to benefit society.

### TECHNOLOGY TRANSFER?



#### The Process

- Research and Development: Researchers at a university create a new invention or discovery.
- Disclosure: Researchers disclose the invention to the university's technology transfer office (TTO).
- **Assessment**: The TTO evaluates the invention's commercial potential, including market demand, patentability, and potential licensees.
- **Protection**: If the invention is deemed to have commercial potential, the TTO works with patent attorneys to file for patent protection.
- **Marketing**: The TTO markets the invention to potential licensees, typically companies that have the resources and expertise to commercialize the technology.
- Licensing: The university enters into a licensing agreement with a company, granting it the right to use and commercialize the invention. The licensing agreement should have strict diligence provisions to enable universities to enforce the agreement.
- Commercialization: The company develops the invention into a product or service and brings it to market.
- **Revenue**: The company pays royalties to the university according to the terms of the licensing agreement. These revenues can be reinvested in research and education at the university and cover the administrative costs of technology transfer.

### FEDERAL REGULATIONS

#### What is the Bayh-Dole Act?

The Bayh-Dole Act, enacted in 1980, is landmark U.S. legislation that fundamentally transformed the landscape of technology transfer in the United States. *It allows universities, small businesses, and nonprofits to retain intellectual property rights to inventions developed from federally funded research.* 

According to 35 U.S.C. 200, Policy and Objective, of the Bayh-Dole Act, Congress is to use the patent system:

- to promote the utilization of inventions arising from federally supported research or development;
- to encourage maximum participation of small business firms in federally supported research and development efforts;
- to promote collaboration between commercial concerns and nonprofit organizations, including universities;
- to ensure that inventions made by nonprofit organizations and small business firms are used in a manner to promote free competition and enterprise without unduly encumbering future research and discovery;
- to promote the commercialization and public availability of inventions made in the United States by United States industry and labor;
- to ensure that the Government obtains sufficient rights in federally supported inventions to meet the needs of the Government and protect the public against nonuse or unreasonable use of inventions; and
- to minimize the costs of administering policies in this area.

## FEDERAL REGULATIONS

#### Key Bayh-Dole

#### **Provisions**

Ownership by Universities: Under the Bayh-Dole Act, <u>universities that receive federal funding for research can elect to retain the</u> <u>title to any inventions resulting from that research.</u> This is a significant departure from prior rules, which generally required that inventions funded by the government be owned by the government.

Duty to Disclose: Once an invention has been made, the university has a duty to disclose the invention promptly to the federal agency that provided funding. The university also has a certain period of time (usually two years, but extendable) to elect to retain title to the invention.

**Government Rights:** While the university can elect to retain title, the federal government retains certain rights. <u>The government has a "nonexclusive, nontransferable, irrevocable, paid-up license" to use the invention.</u> This is often referred to as a "government use license."

**March-In Rights:** The government also has "march-in rights," which means that under certain circumstances, it <u>can require the</u> <u>university (or other owner of the patent) to license the invention to others.</u> These rights are typically invoked when the invention is not being made available to the public on a reasonable basis.

**Preference for U.S. Industry:** If the university licenses the invention to a company, the Bayh-Dole Act generally <u>requires that it</u> gives preference to companies that will manufacture the product substantially in the U.S.

**Inventor's Rights:** *If the university chooses not to retain title to the invention, the inventors may be able to retain the rights.* This is subject to certain conditions and restrictions, and the government still retains its use license.

Income and Royalties: <u>Bayh-Dole requires that universities share royalties with the inventor.</u> It also stipulates that after administrative expenses, any remaining income from the patentishould be used for scientific research or education.

#### **CONCLUSION**

#### **Key takeaways:**

- Universities can protect and monetize their research through a clear understanding and management of IP rights.
- Bayh-Dole Act incentivizes the commercialization of federally funded research, fueling innovation and economic growth.
- Understanding IP rights and Bayh-Dole requirements are crucial in the technology transfer process, including invention—disclosures, determination of inventorship and ownership, public disclosure, patent filing, and marketing to potential licensees.
- Balancing various interests such as conflicts of interest, publication policies, and licensing negotiations can be challenging but is integral to the successful implementation of technology transfer.
- Technology transfer is a rewarding process that converts academic research into real-world applications and drives economic development for the public benefit.



# Thank You

If you have any further questions concerning the material I covered in this presentation after today or may be interested in inviting me to your particular university to provide a more in-depth training or course on this subject matter, feel free to contact me at: <a href="mailto:algreen11@yahoo.com">algreen11@yahoo.com</a> or via cell phone at <a href="mailto:(919) 397-2303">(919) 397-2303</a>.